

**A CASE STUDY ON THE EFFECT OF *DHATTUR TAILA*
APPLICATION IN *SANDHIGATAVATA* (~KNEE OSTEOARTHRITIS)**

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ABSTRACT

Osteoarthritis is a common joint condition. Women are more prone to symptomatically by focal loss of articular cartilage with new bone proliferation and remodeling of the joint contour. Repetitive adverse loading of joints during occupation or sports is a predisposing factor in farmers, miners and athletes. Obesity is also associated with osteoarthritis, presumably due to abnormal load distribution within the joint. The symptoms of osteoarthritis are pain and functional restriction, pain worsen by movement and relieve by rest. Usually one or more joints are affected with painful joint. Knee osteoarthritis may be primary or secondary to trauma; the latter is more common in men

and is typically unilateral. Pain is usually localized to the anterior and medial aspects of the knee. Functional difficulties includes those involved in prolong walking, rising from a chair and bending to put on shoes. In Ayurved, *Sandhigatavata* having similar symptoms like *Akunchana Prasarana Savedana, Shoth and Vatpurnadrutisparsh*. In Ayurved *Sandhigatavata* management are *Daha Swedoupanaha* with *Snehana* and *Swedana* locally for pain. *Dhattur taila* is one of the oil described by the *Ras –Tarangini* for the management of *Sandhigatavata*. The application of *Dhattur taila* in knee osteoarthritis, pain was relieved with shown effective on the assessment on score system in this case study.

KEYWORDS: Knee osteoarthritis, *Sandhigatavata*, *Dhattur tail*.

INTRODUCTION

Osteoarthritis is a common joint condition. Women are more prone to symptomatic osteoarthritis. The male and female ratio of osteoarthritis is 3:1. It is strongly associated with ageing and is a major cause of pain and disability in elder patient. Up to 45% of all people develop knee osteoarthritis and 25% hip osteoarthritis at some point during life. It is characterized by focal loss of articular cartilage with new bone proliferation and remodeling of the joint contour. Repetitive adverse loading of joints during occupation or sports is a predisposing factor in farmers, miners, athletes and professional footballers.^[1] The most significant impact of obesity on musculoskeletal system is associated with Osteoarthritis, a disabling degenerative joint disorder characterized by pain, decreased mobility and negative impact on quality of life.^[2] The symptoms of osteoarthritis are pain and functional restriction; pain increase by movement and relieve by rest. Usually one or more joints are affected with painful joint.^[1]

The prevalence of Osteoarthritis rises progressively with age and it has been estimated that 45% of all people develop Knee Osteoarthritis.^[1] Before age 45, Osteoarthritis occurs more frequently in males. After 55 years of age, it occurs more frequently in females.^[3] Osteoarthritis is the most common rheumatologic problem and it is most frequent joint disease with a prevalence of 22% to 39% in India.^[4]

Knee osteoarthritis may be primary or secondary to trauma; the latter is more common in men and is typically unilateral. Pain is usually localized to the anterior and medial aspects of the knee and upper tibia. Functional difficulties includes those involved in prolong walking, rising from a chair, getting in and out of car and bending to put on shoes and socks.^[1] In Ayurved, *Sandhigatavata* having similar symptoms like *Akunchana Prasarana Savedana, Shoth and Vatpurnadrutisparsh*.^[5] In Ayurved *Sandhigatavata* management are *Daha Swedoupanaha* with *Snehana, Swedana* and *Agnikarma* locally for pain.^[6,7] *Dhattur taila* is one of the oil described by the *Ras –Tarangini* for the management of *Sandhigatavata*.^[8] *Dhattur* is one of the poisonous plant described in the *Ayurved*. The properties of *Vish* is described as *Ushna, Tikshna, Vyavayi* and *Vikashi*.^[9] Thus these properties may help to reduce the sign and symptoms as early as possible. *Sarshapa Tail* is indicated for the *Vata Shaman*. The *Dhattur taila*, which is indicated in the management of *Sandhigatavata* having fruitful effect on reducing pain in knee osteoarthritis. The analgesic property of *Dhattur tail* has very significant which is giving the new horizon to the pain management in *Ayurved*.

The AYUSH department is also working on the pain management in *Ayurveda* so that slogan of AYUSH department in 2018 is on 'pain management in Ayurved'. *Dhattur tail* is one of promising and potent local analgesic giving the rays of light for pain management in Ayurved.

MATERIAL AND METHODS

1. The patient of *Sandhigatavata* (~ osteoarthritis) was coming in OPD and admitted in the Government Ayurved Hospital, Nagpur.
2. *Dhattur tail* was applied locally on the affected Knee.

CASE REPORT

The male patient having the age of 70 years with the complaining of *Sakasht Chankraman* (~difficulty in walking), *Ubhay Janu Sandhishool evam Shoth* (~ both knee joints pain), *Sakasht Utkatasan* (~ difficulty in sitting) since six months. He was admitted for the management on dated 25/04/2017 in Government Ayurved College and Hospital, Nagpur.

Past H/O complaints

The patient has previous history of hypertension since 15 years and IHD since 3 years.

Present Medicinal History

He was on the treatment

- 1) Tablet Starpress XL 50(Metaprolol50mg) once in a day
- 2) Tablet Carvedilol 3.125mg once in a day
- 3) Capsule Ecosprin AV 75(Ecosprin 75mg+Atorva10mg) at night.

Criteria of Diagnosis

The patients was diagnosed on the basis clinical features of *Sandhigatavata* with reference to Osteoarthritis described in Ayurvedic texts.

1) Sign and Symptoms of *Sandhigata Vata* as mentioned by *Ayurvedic* text.

- 1) *Sandhi Shula* (~Pain at joints)
- 2) *Vatapurna Druti Sprarsha*
- 3) *Sandhi Shotha* (~Swelling)
- 4) *Prasarana Akunchana Vedana*(~pain on flexion and extension)
- 5) *Sandhi Stambha*(~stiffness)

2) In X-ray degenerative changes in knee joints.

General Examinations

Pulse: 68/min

Blood Pressure: 110/70 mm of Hg

Body Weight: 69 kg

Height: 160cm, B.M.I:27.0kg/m²

Temperature: 96.2⁰C

Tongue: Coated

Systemic Examination

R.S. = Air entry bilaterally equal

C.V.S. = S₁S₂ Normal

C.N.S. = Conscious, well oriented

Per Abdomen Examination: Soft. Non tender

Knee Joint Examinations.

Inspection

	Right	Left
Position	Normal	Normal
Swelling	Present	Present
Muscular Wasting	No	No
Fixed Deformity	No	No

Palpation

	Right	Left
Local Temperature	Normal	Normal
Tenderness	Present	Present
Crepitus	Present	Present
Movement	Painful	Painful

Investigation

a) Pathological

Hb%- 12.4gm%, TLC- 8300/mm³, DLC: N-58%, L-35%, M+E- 7%.

b) Radiological: X-ray Knee joint S/O Bilateral space reduction and arthritic changes.

Criteria of Assessment: Gradation will be done on the score system given below. This score system has been described by KHUJE S. M. (2001).

S.N	Pramukha Vedana (~Chief Complaints)	Graddtion	
1.	Pain at joint(~Sandhi Shool)	No Pain	0
		Mild Pain	1
		Moderate Pain without difficulty in walking	2
		Much difficulty in walking	3
		Pain prevents walking	4
2.	Pain on flexion and extension of joint (~Akunchan Prasaranyo Shulam)	No Pain	0
		Pain without wincing of face	1
		Pain with wincing of face	2
		Shouts or prevents complete flexion	3
		Doesn't allow passive movements	4
3.	Stiffness (~Sandhi Graha)	No Stiffness	0
		Mild Stiffness	1
		Moderate Stiffness	2
		Much difficulty due to stiffness	3
		Severe Stiffness	4
4.	Shoatha(~Swelling)	No Shoatha	0
		Slight Shoatha	1
		Moderate Shoatha	2
		Much Shoatha	3
5.	Tenderness (~Pidanasahatva)	No tenderness	0
		Patient says tenderness	1
		Wincing of face	2
		Wincing of face and withdraws the affected part	3
		Not allowing to touch joint	4
6.	Nature of pain	No Pain	0
		Pain only in the morning	1
		Pain in the evening and morning	2
		Pain only in evening	3
		Pain presents whole day	4

Goniometric angle of knee joint

Angle of knee joint	Normal Value	Patient Value	
		Right	Left
Angle of Flexion	0 ⁰ -135 ⁰		
Angle of Extension	135 ⁰ -0 ⁰		

Management

Management on dated 26/4/2017 from

- 1) Tab. Ecosprin AV75 at night.
- 2) Tab. Carvedilol 3.125mg once in a day.
- 3) Tab. Starpress XL 50 once in a day.
- 4) *Rukshan Pachan Kwath* 40ml, before meal.

- 5) Syp.Vatantak 4tsf, after meal.
- 6) Lakshadi Guggul 500mg, before meal.

All above treatment was continued and added as below on dated 28/04/2018

- 1) Janudhara with Dhattur Tail for 20minutes for 15days.

On 3/5/18 Patient was complaining of *Udardah* so hold *Lakshadi Guggul* and *Syp.Vatantak*. And treatment accordingly as below.

- 1) *Panchtikta Ghrut Guggul* 500mg, after meal.

On dated 10/5/18 Continue treatment as above and add below treatment for *Udardah*.

- 1) *Sutshekhhar Ras* 500mg, twice a day.
- 2) *Amalaki Churna* 5gm, before meal.

OBSERVATION AND RESULTS

Observation		0 Day(B.T)	7 th Day	15 th Day(A.T.)
Sr.No	Date	28/04/2017	4/05/17	12/5/17
1.	Pain at joint(Sandhi Shool)	4	2	2
2.	Pain on flexion and extension of joint(Akunchan Prasaranyo Shulam)	3	2	1
3.	Stiffness(Graha)	2	1	1
4.	Shotha(Swelling)	1	0	0
5.	Tenderness(Pidasasahatva)	2	1	1
6.	Nature of pain	4	4	4

Goniometric angle of knee joint

Angle	B.T.		A.T.	
	Right	Left	Right	Left
Angle of Flexion	10 ⁰ -110 ⁰	0 ⁰ -120 ⁰	0 ⁰ -130 ⁰	0 ⁰ -130 ⁰
Angle of Extension	110 ⁰ -10 ⁰	120 ⁰ -0	130 ⁰ -0	130 ⁰ -0

DISCUSSION

Snehana is a main treatment of *Dhatukshaya Vata Vyadhi* as explained by *Charaka*.^[10] *Snehana* can be done with various type of *Sneha Vicharna*.^[11] *Abhyanga* is one of the type of *Sneha Vicharana*. According to *Ras Tarangini*, Tail made from *Dhattura* is used for the management of *Sandhigatavata*. *Vish Dravya* having *Ashukaritva* property, and *Dhattur* is one of the *Dravya*. Due to such type of property *Dhattur tail* giving the fast pain relief in *Sandhigatavata*. Any adverse reaction of locally application of *Dhattur tail* was not noted.

In above case study *Dhattur Tail* was applied locally along with some internal medication. So that only effect of *Dhattur Tail* was not assessed in this case study. But during internal medication patient was also complaining of joint pain which relieved after application of *Dhattur Tail*. So such type of pinpoint observation encouraging the concentrate on effect of analgesic property of *Dhattur Tail*.

CONCLUSION

Local application of *Dhattura Tail* is relieves the pain of knee joint in this case study in short duration. Such type of *Shaman Chikitsa* also gives new rays of light for pain management in *Ayurved*. The analgesic property of *Dhattur Tail* will be carried out on large scale.

REFERENCES

1. M. Doherty, P.Lanyon, S.H.Ralston: 2014: Davidson's Principle and Practice of Medicine: 22nd Edition: published by Churchill Livingstone.
2. <https://googleweblight.com/i?u=https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3788203/&hl=en-IN&r=1&grqid=9J7GVPdp>.
3. www.medicinenet.com/osteoarthritis/article.htm.
4. www.ncbi.nlm.nih.gov.in.
5. Tripathi R.: Charaka Samhita- Chikitsasthan 28/37: Chaukhambha Surbharati Prakashan, 2011.
6. Shashri A.: Sushrut Samhita-Chikitsasthan 4/8: Chaukhambha Sanskrit Sansthan-Varanasi, 2014.
7. Joshi S.: Yogaratakara-Vatavyadhinidanam page no. 364: Chaukhambha Sanskrit Pustakalaya, 1939.
8. Shastrinath K.: Ras Tarangini- Chaturvinshati 24/375 page no 715: 1994.
9. Shashri A.: Sushrut Samhita-Kalpasthan 2/20: Chaukhambha Sanskrit.
10. Sansthan-Varanasi, 2014.
11. Tripathi R.: Charaka Samhita- Chikitsasthan 28/76: Chaukhanbha Surbharati Prakashan, 2011.
12. Tripathi R.: Charaka Samhita- Sutrasthan13/23-25: Chaukhanbha Surbharati Prakashan, 2011.